

In the Claims:

Please amend claims 1 and 2, and add new claims 3-13 as indicated in the following listing, which replaces all prior versions.

1. (Currently Amended) A power converter, comprising:
an input circuit having a rectifier that is a single diode rectifier and a filter that includes a non-electrolytic capacitor connected in series with the rectifier, the filter providing a DC voltage output; and
a switched mode power supply IC arranged to receive the DC voltage output from the filter.
2. (Currently Amended) A power converter as claimed in claim 1, wherein the ~~input circuit further comprises a filter having a~~ non-electrolytic capacitor has a capacitance of about 100 nF.
3. (New) A power converter as claimed in claim 1, wherein the filter further includes an inrush resistor, a coil, and an electrolytic capacitor.
4. (New) A power converter as claimed in claim 3, wherein the electrolytic capacitor has a capacitance of about 10 μ F.
5. (New) A power converter as claimed in claim 3, wherein the coil and the non-electrolytic capacitor are arranged to filter distortions caused by the switched mode power supply IC.
6. (New) A power converter as claimed in claim 3, wherein the coil and the inrush resistor are connected in parallel between the non-electrolytic capacitor and the electrolytic capacitor.

7. (New) A power converter as claimed in claim 1, wherein the DC voltage output of the filter is applied to a series connection of a primary winding, the switched mode power supply IC, and a resistor.
8. (New) A power converter as claimed in claim 1, wherein the switched mode power supply IC includes a high gain feedback loop.
9. (New) A power converter as claimed in claim 8, wherein the high gain feedback loop includes a multiplier arranged to diminish ripple caused by the non-electrolytic capacitor.
10. (New) A power converter as claimed in claim 9, wherein the multiplier is a factor 10 multiplier.
11. (New) A power converter as claimed in claim 1, wherein the switched mode power supply IC includes an internal start-up circuit having a high-voltage start-up current source and without provision of any dissipative bleeder resistor.
12. (New) A power converter, comprising:
 - an input circuit having a rectifier that is a single diode rectifier and a filter providing a DC voltage output, the filter including a non-electrolytic capacitor having a capacitance of no more than about 100 nF connected in series with the rectifier, a electrolytic capacitor, an inrush resistor, and a coil connected in parallel with the inrush resistor between the electrolytic capacitor and the non-electrolytic capacitor; and
 - a switched mode power supply IC arranged to receive the DC voltage output from the filter.
13. (New) A power converter as claimed in claim 12, wherein the electrolytic capacitor has a capacitance of about 10 μ F.